



IFW  
Docket No.: 0171-1311PUS1  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Go ONO et al.

Application No.: 10/593,772

Confirmation No.: 9154

Filed: September 22, 2006

Art Unit: 1774

For: CHARGE-TRANSPORTING VARNISH AND  
ORGANIC ELECTRO-LUMINESCENT  
DEVICES MADE BY USING THE SAME

Examiner: Not Yet Assigned

**LETTER**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Subsequent to the filing of the above-identified application on September 22, 2006, attached hereto is an English translation of the International Preliminary Examination Report (Form PCT/IPEA/409) that should be made of record in the present application. Additionally, we also attach hereto a copy of the Notification of Transmittal of Copies of Translation of the IPER on Patentability (Form PCT/IB/338) that should also be made of record in the present application.

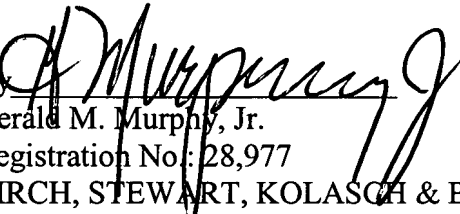
Application No.: 10/593,772

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or to credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Dated: April 9, 2007

Respectfully submitted,

By   
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Attachment(s)



**TRANSLATION**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>FAP-4141</b>	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. <b>PCT/JP2005/005347</b>	International filing date (day/month/year) <b>24.03.2005</b>	Priority date (day/month/year) <b>25.03.2004</b>
International Patent Classification (IPC) or national classification and IPC <b>C08L79/00, C08L79/08, C09K11/06, H01L51/50</b>		
Applicant <b>NISSAN CHEMICAL INDUSTRIES, LTD.</b>		

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.
3.	This report is also accompanied by ANNEXES, comprising: a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows: <input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4.	This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2005/005347

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This report is based on translations from the original language into the following language \_\_\_\_\_ which is the language of a translation furnished for the purposes of:
    - ☐ international search (Rule 12.3 and 23.1(b))
    - ☐ publication of the international application (Rule 12.4)
    - ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
  - ☒ the international application as originally filed/furnished
  - ☐ the description:
    - pages \_\_\_\_\_ as originally filed/furnished
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ the claims:
    - nos. \_\_\_\_\_ as originally filed/furnished
    - nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
    - nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ the drawings:
    - sheets \_\_\_\_\_ as originally filed/furnished
    - sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
  - ☐ the description, pages \_\_\_\_\_
  - ☐ the claims, nos. \_\_\_\_\_
  - ☐ the drawings, sheets/figs \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - ☐ the description, pages \_\_\_\_\_
  - ☐ the claims, nos. \_\_\_\_\_
  - ☐ the drawings, sheets/figs \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2005/005347

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	10, 11	YES
	Claims	1-9	NO
Inventive step (IS)	Claims		YES
	Claims	1-11	NO
Industrial applicability (IA)	Claims	1-11	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
<p>Document 1: JP 7-90179 A (Kabushiki Kaisha Tomoekawa Seisakusho), 04 April 1995, claims; paragraphs [0002] to [0005], [0007], [0009] to [0010], [0016] and [0021]; examples</p> <p>Document 2: JP 11-185962 A (Shadan Hojin Koto Gijutsu Kenkyuin Kenkyukumiai), 09 July 1999, claims, examples</p> <p>The inventions set forth in claims 1 to 9 are disclosed in document 1 cited in the international search report; therefore, the inventions in question lack novelty and do not involve an inventive step.</p> <p>Document 1 is considered to disclose a conductive varnish that comprises a polyimide precursor and either a polyaniline or a combination of a polyaniline and a dopant, wherein said constituents have been dissolved in a solvent. Therein, the abovementioned polyaniline has a number-average molecular weight of between 2,000 and 500,000, and said range overlaps with the range for the number-average molecular weight of the polyaniline in the inventions set forth in claims 1 to 9. Furthermore, document 1 indicates that the number-average molecular weight of the polyaniline is determined so as to</p>			

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2005/005347

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

accommodate a balance of characteristics such as the solubility of the solvent and the mechanical strength of the resulting varnish (refer to paragraph [0007], etc.), like in the inventions set forth in the present application. Such being the case, both inventions involve the same technical concept.

As a result, the inventions set forth in claims 1 to 9 are either the same as the invention disclosed in document 1, or would have been easy for a person skilled in the art to conceive of in the light of the invention disclosed in document 1.

The invention set forth in claims 10 and 11 does not involve an inventive step in the light of document 1 and document 2 cited in the international search report.

The feature wherein a conductive varnish obtained by dissolving a polyimide (precursor) and either a polyaniline or a combination of a polyaniline and a dopant in a solvent is used to form the charge-transport film of an organic electroluminescent element was well known, as disclosed in document 2. Such being the case, it would not have been especially difficult for a person skilled in the art to conceive of employing the varnish disclosed in document 1 in a similar manner.

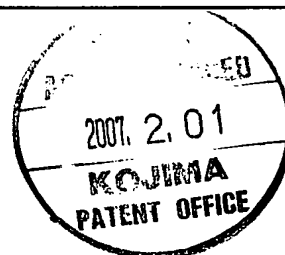
From the INTERNATIONAL BUREAU

**PCT**

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY  
(CHAPTER I OR CHAPTER II  
OF THE PATENT COOPERATION TREATY)  
(PCT Rules 44bis.3(c) and 72.2)

To:

KOJIMA, Takashi  
GINZA OHTSUKA Bldg.2F  
16-12, Ginza 2-chome  
Chuo-ku, Tokyo 1040061  
JAPON



Date of mailing ( <i>day/month/year</i> ) 18 January 2007 (18.01.2007)	
Applicant's or agent's file reference FAP-4141	<b>IMPORTANT NOTIFICATION</b>
International application No. PCT/JP2005/005347	International filing date ( <i>day/month/year</i> ) 24 March 2005 (24.03.2005)
Applicant NISSAN CHEMICAL INDUSTRIES, LTD. et al	

**1. Transmittal of the translation to the applicant.**☐

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).

☒

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

**2. Transmittal of the copy of the translation to the designated or elected Offices.**

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

EP, KR

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

**3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).**

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

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Authorized officer

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